



Headquarters: Alomone Labs Ltd.
Har Hotzvim Hi-Tech Park P.O. Box 4287, Jerusalem 91042, Israel.
Tel: +972-2-587 2202 Fax: +972-2-587 1101 or +972-2-642 6975
email: techsupport@alomone.com http://www.alomone.com

Molecular Tools for the Life Science Community

Certificate of Analysis

SB 203580

Cat. #: S-370

Current Lot #: S370SB0101, S370SB011, S370SB025

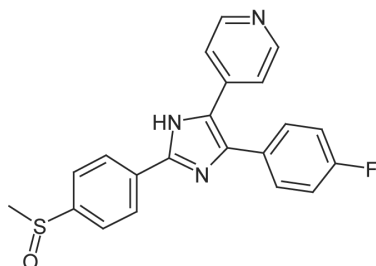
Source description: Synthetic.

M.W.: 377.44 daltons.

Purity: >99%.

Effective concentration: 10-100 μ M.

Structure:



Chemical name: 4-[5-(4-Fluorophenyl)-2-[4-(methylsulfonyl)phenyl]-1H-imidazol-4-yl]pyridine.

Molecular formula: C₂₁H₁₆FN₃OS.

CAS No.: 152121-47-6.

Activity: SB 203580 is a specific inhibitor for the p38 MAP kinase homologues.

References:

1. Lee, J.C. *et al.* (1994) *Nature* **372**, 739.
2. Cuenda, A. *et al.* (1995) *FEBS Lett.* **364**, 229.
3. Whitmarsh, A.J. *et al.* (1997) *Mol. Cell. Biol.* **17**, 2360.
4. Clerk, A. *et al.* (1998) *FEBS Lett.* **426**, 93.
5. Hunt, A.E. *et al.* (1999) *J. Biol. Chem.* **274**, 7591.
6. Ward, S.G. *et al.* (1997) *Biochem. Soc. Trans.* **2**, 304S.

Sizes: 1 mg, 5 x 1 mg, or 10 x 0.1 mg lyophilized powder.

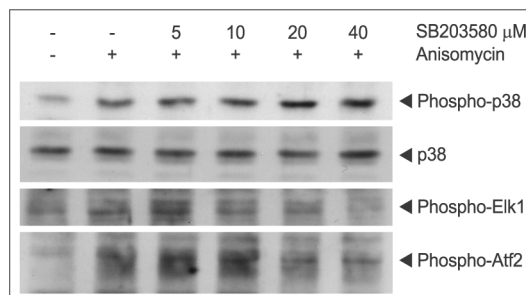
Storage before reconstitution: Lyophilized powder can be stored intact at room temperature for several weeks. For longer periods, it should be stored at -20°C.

Reconstitution: DMSO. Centrifuge all product preparations before use (10000 x g 5 min).

Storage and stability after reconstitution: Up to two weeks at 4°C or six months at -20°C.

Protect from light.

Bioassay: SB 203580 inhibits the phosphorylation of Elk1 and Atf2 via p38 in 3T3-L1 cells.



Cells were grown to 70% confluence and serum starved for 3 h. The cells were then incubated for 2 h with various concentrations of **SB 203580** (#S-370) and stimulated with 5 μ M **Anisomycin** (#A-520). Cell proteins were resolved by SDS-PAGE and probed with anti-phospho-p38 MAPK, anti-p38 MAPK, anti-phospho-Elk1 and anti-phospho-Atf2 as indicated. The phosphorylation of Elk1 and Atf2 decreased in a dose-dependent manner.

For research purposes only, not for human use.
Last Update: May, 2010.